# ENVIRONMENTAL ASSESSMENT

for

# FY 02 YOUNG STAND PRUNING (OR-110-02-033)

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT GRANTS PASS RESOURCE AREA

July 2002

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT

# EA COVER SHEET

RESOURCE AREA: <u>Grants Pass</u> <u>FY & REPORT # EA Number OR-110-02-033</u>

ACTION/TITLE: FY 02 - Young Stand Pruning

LOCATION: Grants Pass Resource Area

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# GRANTS PASS RESOURCE AREA ENVIRONMENTAL ASSESSMENT

# FY 02 - Young Stand Pruning

		<u>Page</u>
Chapter 1		
-	pose and Need for Action and Alternatives	1
A.	Introduction and Need for the Proposal	
	1. Introduction	1
	2. Purpose of and Need for the Proposed Action	
B.	Scoping Issues Relevant to the Proposal	
D.	Proposed Action and/or Alternatives	
	1. Alternative 1: No Action Alternative	
	2. Alternative 2: Proposed Action - Pruning	
	3. Project Design Features	
Chapter 2		
-	ironmental Consequences	4
A.	Introduction	
B.	Site Specific and Cumulative Effects of the Alternatives	4
Chapter 3		
-	ncies and Persons Consulted	9
A.	Public Involvement	
B.	Availability of Document and Comment Procedures	9
UNIT MAPS	S	11
	TABLES	
Table 1 - Pro	oposed Pruning Units	10

# Chapter 1 Purpose and Need for Action and Alternatives

# A. Introduction and Need for the Proposal

#### 1 Introduction

The purpose of this environmental assessment (EA) is to assist in the decision-making process by assessing the environmental and human affects resulting from implementing the proposed project and/or alternatives. The EA will also assist in determining if an environmental impact statement (EIS) needs to be prepared or if a finding of no significant impact (FONSI) is appropriate.

This EA tiers to the following documents:

- (1) the Final EIS and Record of Decision dated June 1995 for the Medford District Resource Management Plan dated October 1994 (RMP);
- (2) the Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated February 1994;
- (3) the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and its Attachment A entitled the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated April 13, 1994 (NFP); and
- (4) Record of Decision and Standards and Guidelines for Amendments to the Survey and Manager, Protection Buffer, and other Mitigation Measures Standards and Guidelines dated January 2001.

#### 2. Purpose of and Need for the Proposed Action

The RMP (p.183) directs the implementation of silvicultural practices that result in array of conditions, including timber production. Pruning is directed at improving wood quality: the production of clear wood. It increases wood quality through the production of clear wood on rotations shorter than would be required without the action (RMP, p. 185)

#### B. Scoping Issues Relevant to the Proposal

No significant planning issues were identified during internal scoping by the interdisciplinary team.

#### C. Project Location

The location of the project areas are shown on Maps located in the Appendix.

# D. Proposed Action and/or Alternatives

#### 1. Alternative 1: No Action Alternative

In this EA document the "no-action" alternative is defined as not implementing any aspect of the proposed action alternative(s). Defined this way, the no action alternative also serves as a baseline or reference point for evaluating the environmental effects of the action alternatives. Inclusion of this alternative is done without regard to whether or not it is consistent with the Medford District RMP.

It should be pointed out that the no action alternative is not a "static" alternative. Implicit in it is a continuation of the environmental conditions and trends that currently exist or are occurring within the project area. This would include trends such as vegetation succession and consequent wildlife habitat changes, road condition / deterioration, rates of erosion, disease spread, continuation of current road densities, trends in fire hazard changes, OHV use, etc.

# 2. Alternative 2: Proposed Action - Pruning

The proposed action is to prune selected conifers (disease-free sugar pine, Douglas-fir or ponderosa pine) trees in previously precommercially thinned stands as shown on the attached maps (Appendix A). Pruning would be done on seventeen (17) units for a total of 295 acres. The resultant spacing of pruned trees will be approximately 20' x 20'. The range of tree diameters which will be pruned is from three (3) to ten (10) inches DBH selected from the healthiest and best formed trees. Trees will be pruned to height of approximately 9 or 18 feet but not more than one half the total tree height, which ever is less. Live and dead branches, lateral sprouts and epicormic branches will be pruned. Pruning will be done with hand tools: pole saws, pole pruners, loppers, and pruning knives. Limbs will be pruned to within ½" of the stem but outside the branch collar. Power tools will not be used for the primary activity of pruning.

No pruning will occur within the riparian reserves for any perennial or intermittent stream as shown on attached unit maps.

Slash resulting from pruning will be left on the forest floor. Due to the limited amount of slash which will be created from this action, no additional slash treatment (*e.g.*, hand piling or pile burning) is anticipated. However, all units will have a post-treatment survey for hazardous fuel assessment. If slash created from the treatments creates an unacceptably high hazardous condition, the unit or portions of the units would have slash hand piled and piles burned. Prioritization for treatment would be based on hazard and risk priorities. The areas selected for hazard reduction treatment would be critical points on the sites such as where the highest potential loss would be experienced if a wildfire occurred, or along areas where a high risk of an ignition source would be present (*e.g.*, along heavily used roads). Maximum pile size would be approximately 5' in diameter by 6' in height. All piles would be covered with a 5' x 5' sheet of 4-mil polyethylene plastic. At least 3/4 of the pile's surface would be covered and the plastic anchored to preserve a dry ignition point. Slash piles would not be placed on logs, stumps, talus slopes, in roadways or drainage ditches. Piles would not be closer than 10' to pruned trees or 25'

to a unit boundary.

Ignition of piles would be with drip torches or other hand held devices. Burning would be done in the fall/winter season after significant rainfall has occurred. A prescribed burn plan would be prepared to address burning objectives and operational concerns. Prescribed burn plans include weather parameters and design features to diminish any potential of fire escape.

# 3. Project Design Features

Project design features (PDFs) are included for the purpose of reducing anticipated adverse environmental impacts identified in the scoping process and which might stem from the implementation of the proposed action or alternatives. This section outlines these PDFs.

#### a. Air Quality / Smoke Management

To conform with air quality standards and guidelines, all prescribed burning would be managed in a manner consistent with the requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality's Air Quality and Visibility Protection Program. When burn units are adjacent to rural residential areas, burning would be timed to minimize the amount of residual smoke. This can be accomplished by burning when conditions for smoke dispersal are optimal such as during rainy days and periods when atmospheric instability is present.

Patrol and mop-up of burned piles would occur when needed to prevent burned areas from reburning or becoming an escaped fire.

#### b. Botanical Resource Protection

All previously located / established buffers for T&E or S&M species would remain intact and if hand piling and burning would be necessary, it would be precluded within the buffers.

# Chapter 2 Environmental Consequences

#### A. Introduction

Only substantive site-specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this chapter. If an ecological component is not discussed, it should be assumed that the resource specialists have considered affects to that component and found the proposed action or alternatives would have minimal or no affects. Similarly, unless addressed specifically, the following were found not to be affected by the proposed action or alternatives: air quality; areas of critical environmental concern (ACEC); cultural or historical resources; Native American religious sites; prime or unique farmlands; Flood plains; endangered, threatened or sensitive plant, animal or fish species; water quality; wetlands/riparian zones; wild and scenic rivers; and wilderness areas. In addition, hazardous waste or materials are not directly involved in the proposed action or alternatives.

### **B.** Site Specific and Cumulative Effects of the Alternatives

- 1. Silvicultural / Wood quality
  - a. Alternative 1 No Action

The stand will continue on its present growth rate trajectory. Pruning would occur naturally at some point in the future as the trees grow. The wood quality grown until that time would be knotty.

#### b. Alternative 2 - Proposed Action

This action will result in producing wood with tight knots or clear of knots. This is essential for production of clear wood with grades above "common" under normal, even aged rotations for Douglas-fir (RMP, p. 185).

For healthy sugar pine trees which are pruned, there is a beneficial effect to removing the lower branches since the lower branches are those which are first inoculated with the spores of white pine blister rust from *Ribes* plants. These inoculation centers later spread to infect the entire tree.

#### 2. Wildlife

Although a range of species may utilize the areas proposed for pruning, there are none that are considered exclusively dependent on this age class. Consequently, the potential impacts are reduced. This discussion will focus on potential impacts on T&E and survey and manage species.

#### a. Affected Environment

The areas proposed for pruning include stands that are generally less than 30 years old. Stands less than 30 years old do not provide nesting habitat for spotted owls, marbled murrelets, or bald eagles. Bald eagles and spotted owls may occasionally use young stands for foraging. This foraging is most likely associated with edges where adjacent large trees provide perching opportunities and cover. Nine units are proposed for pruning within marbled murrelet zone 2 (35-50 miles inland). However, there have been no marbled murrelet detections within this zone in the basin and the probability of their occurrence is very low. The stands proposed for pruning are not considered suitable marbled murrelet nesting habitat.

Survey and manage molluscs with potentially suitable habitat in the project area include *Monadenia chaceana* and *Helminthoglypta hertlieni*. These molluscs are strongly associated with talus and rock outcrops. Coarse woody debris is also an important habitat component for these species. Red tree voles are associated with mature Douglas-fir stands with high canopy closure (>50%). Stands within the project area are not representative of suitable red tree vole habitat.

#### b. Environmental Consequences

#### 1) Alternative 1: No Action

Typically, young trees undergo a natural process of self pruning. As trees mature, they lose their lower branches through natural processes. Over time, lower branches die and fall to the ground where they contribute to ground cover.

For spotted owls, foraging and nesting habitat suitability is expected to improve as these stands mature. In general, young stands do not represent preferred foraging habitat and when utilized, foraging is typically confined to the edges.

For marbled murrelets, young stands do not provide suitable nesting habitat. As these stands mature, their suitability as nesting habitat would improve.

For bald eagles, there are no known nests within ½ mile of the proposed activities. Additionally, these young stands do not provide preferred foraging habitat for bald eagles. As these stands mature, their suitability as nesting habitat would improve.

For red tree voles and survey and manage molluses, habitat conditions for these species will improve as these stands mature.

# 2) Alternative 2: Proposed Action

In general, the proposal will accelerate the pruning process already underway. Over time, stands undergo a natural process of self-pruning. As trees mature, they lose their lower branches through natural processes.

Pruning, whether mechanical or natural, may result in reduced humidity and increased

temperature. Under natural conditions, the pruning process is typically more gradual and changes in humidity and temperature can be offset by changes in surrounding vegetation. When trees are pruned mechanically, this shift in humidity and temperature is rapid. In both circumstances, changes in temperature and humidity could be offset by increased shrub density resulting from the increased sunlight reaching the understory. Additionally, because not every tree is pruned, these potential impacts are reduced.

Many species of wildlife are influenced by the complexity of the vertical structure of a stand. In general, vertical complexity contributes to more diverse species composition, particularly neotropical migrants. On the other hand, very dense stands can reduce the usefulness of habitat to wildlife by eliminating or reducing valuable shrub and forb vegetation and impacting accessability.

Basal area will not be reduced as a result of this project. However, the reduction of vertical structure may temporarily impact the suitability of habitat for species that are closely tied to the lower branches of trees. Because the pruning is scheduled for young stands (25-35 years old), the potentially affected species would not likely include those associated with mature or old growth habitat. Also, the long term ability of the stand to attain the desired vertical structure associated with mature forests would not be impacted by the pruning treatments.

For spotted owls, pruning will not have broad implications for the suitability of foraging habitat. This is based primarily on the fact that 1) young stands do not generally represent preferred foraging habitat and, 2) in young stands, foraging by spotted owls is typically confined to the edges. Additionally, as these stands mature, they will continue to develop conditions that contribute to improved foraging suitability.

For marbled murrelets, young stands do not provide suitable nesting habitat. Pruning treatments will not impact the ability of these trees to achieve suitable nesting habitat over the long term as these stands mature. Based on this, pruning treatments are not anticipated to result in impacts to the marbled murrelet. Additionally, the areas proposed for pruning are located where the probability of murrelets is very low.

For bald eagles, there are no known nests within ½ mile of the proposed activities. Additionally, these young stands do not provide preferred foraging habitat. Pruning treatments will not impact the ability of these trees to achieve suitable nesting habitat as these stands mature. Based on this, there are no anticipated impacts to the bald eagle.

For red tree voles and survey and manage molluscs, there are no anticipated direct impacts. Since the sites are not considered suitable RTV habitat, no impacts to RTVs are anticipated. For mollusc, there is no ground disturbance and no anticipated impact to important site features such as coarse woody debris and rock outcrops.

#### 3. Fisheries

a. Alternative 1 - No Action

Allowing the trees outside of the riparian reserves to prune naturally will have no identifiable effect on aquatic resources or any fish, including Southern Oregon/Northern California (SONC) coho, which are federally listed as threatened.

### b. Alternative 2 - Proposed Action

The proposed pruning outside of riparian reserves will not affect any fish or aquatic resources, including Southern Oregon/Northern California (SONC) coho, which are federally listed as threatened. Essential Fish Habitat (EFH) will not be affected by the proposed pruning. Pruning outside of the riparian reserves will not create conditions that will retard or prevent the attainment of ACS objectives. Streams within the units are disconnected from any of the effects of the pruning because of the buffering provided by the riparian reserve widths of 150' on streams without fish and 300' on streams with fish.

#### 4. Soils and Water

#### a. Alternative 1 - No Action

Natural pruning will occur over the long term resulting in an extended release to the soil of nutrients held in the foliage and branches as low branches slowly break and drop to the forest floor

### b. Alternative 2 - Proposed Action

The proposed action will not have any adverse effect on soils. It will result in somewhat accelerated rate of organic material deposition on the forest floor from that of the no action alternative. The accumulated organic matter (cut slash) being left on the forest floor will start decomposing until nutrients become available to growing plants in roughly five to ten years. There may be some short term (very localized) beneficial effect from added protection to mineral soil provided by the slash. No cumulative effects of concern are anticipated. This alternative will not create conditions that will retard or prevent the attainment of ACS objectives.

# 5. Botany

#### a. Affected Environment

The proposed treatment is not considered to be ground disturbing, therefore the treatment units have not been surveyed for vascular or non-vascular special status or survey and manage plants. Previously established buffers will be maintained and burning within will be precluded.

#### b. Alternative 1 - No Action

Since no special status or survey and manage plant habitat exists for this treatment, the no action alternative would have no effect. The no action alternative would not create special status or survey and manage habitat.

#### c. Alternative 2 - Proposed Action

The pruning treatment proposed will only occur on lower branches which are not special status or survey and manage plant habitat. The main portion of canopy will be maintained and tree boles will not be disturbed.

The trees being pruned are not late-successional forest and their upper canopies will remain intact. Therefore the likelihood of affecting special status or survey and manage plants is extremely low. The action will not affect any T&E plants or habitat. Because the upper canopy is being left intact and tree growth will improve from this treatment, future shading or substrate for the reestablishment of native vascular and non-vascular species could be a beneficial effect of this treatment.

#### 6 Fuels and Fire

#### a. Alternative 1 - No Action

Fire hazard and risk of a stand replacement wildfire would continue to increase due the presence of fuel ladders closer to the ground.

#### b. Alternative 2 - Proposed Action

This action could have both positive and negative effects on fuel hazard. Due to the limited amount of slash which will be created and left on the ground, it could have a slight effect of increasing the fire risk for a short time. For the long term, however, this action will help to reduce the fuel ladder on treated trees, and reduce the risk of adverse wildfire effects (*i.e.* tree mortality).

# Chapter 3 Agencies and Persons Consulted

# A. Public Involvement

No formal public scoping or comment period is planned due to the small nature of the project. A notice of decision will be published in the local newspaper upon completion of the Decision Record.

# **B.** Availability of Document and Comment Procedures

Copies of the EA document will be available in the BLM Medford District Office and on the Medford District's web site.

Table 1 - Proposed Pruning Units FY02 - EA #OR110-02-033

Proposed Treatment	Key #	Legal	Land Allocation of the unit	Unit Name	Total Unit Acres	Acres within Riparian Reserve	Treatmen t Acres	Stand age	Last fuel loading treatment	Riparian Class	5 <sup>th</sup> field Watershed
PRUNING	112782	34S-07W-21-012	Matrix / Riparian Reserve	Hog Remains 1	22	6	16.	20	PCT1997	I	Big Hog
PRUNING	116400	34S-07W-21-018	Matrix / Riparian Reserve	Upper Stratton 1	31	10	21.	30	PCT1991	P	Big Hog
PRUNING	116401	34S-07W-04-007	Matrix	Upper Stratton 2	25	0	25.	30	PCT1991	-	Big Hog
PRUNING	112780	34S-07W-21-010	Matrix / Riparian Reserve	Hog Remains 3	10	7	3.	20	PCT 1993	I	Big Hog
PRUNING	112783	34S-07W-21-014	Matrix / Riparian Reserve	Hog Remains 2	16	10.	6.	20	PCT 1997	I	Big Hog
PRUNING	113350	34S-05W-27-016	Matrix / Riparian Reserve	Robert's Mtn. 27-11C	9	2.	7.	20	PCT 1995	I	Jumpoff Joe
PRUNING	116433	34S-05W-28-016	Matrix / Riparian Reserve	Winona	24	3.	21.	30	PCT 1995	I	Jumpoff Joe
PRUNING	116164 113026	35S-05W-11-005 / 02- 003	Matrix / Riparian Reserve	Elk Mountain # 3	10	3	7	30	PCT 1990	I	Jumpoff Joe
PRUNING	113024	35S-05W-11-003	Matrix / Riparian Reserve	Elk Mountain	14	5.	9.	30	PCT 1990	I	Jumpoff Joe
PRUNING	157924 157705	37S-04W-07-020 / 18- 004	Matrix	Savage Creek 7	33	0.	33.	30	PCT1998	-	Grants Pass
PRUNING	113597	37S-05W-11-009	Matrix / Riparian Reserve	Savage Creek	14	1.	13.	30	PCT1995	I	Murphy
PRUNING	113598	37S-05W-13-004	Matrix / Riparian Reserve	Savage Creek 004	7	4.	3.	30	PCT1995	I	Murphy
PRUNING	115971	37S-05W-23-011	Matrix / Riparian Reserve	Savage Pass 23-1	36	12.	24.	30	PCT 1998	I	Murphy
PRUNING	111654	38S-07W-29-002	Matrix / Riparian Reserve	Tall Timber 29-12	20	0.	20.	30	PCT2000	I	Deer Creek
PRUNING	113346	38S-07W-35-007	Matrix / Riparian Reserve	N. Fork Thompson Cr. 1	37	12.	25.	30	PCT2000	P	Deer Creek
PRUNING	113537	39S-07W-21-007	Matrix / Riparian Reserve	Bear Grapes 21-3B	37	2.	35.	20	PCT 2000	I	Sucker Creek
PRUNING	113538	39S-07W-21-008	Matrix / Riparian Reserve	Bear Grapes 3A/3C	31	4.	27.	20	PCT2000	I	Sucker Creek
				Total Acres	376	81	295				

Footnotes: P = Perennial Stream Flow. I = Intermittent Stream Flow. -= No Streams

# **UNIT MAPS**

Map 1.	Hog Remains 1
Map 2.	Upper Stratton 1
Map 3.	Upper Stratton 2
Map 4.	Hog Remains 3
Map 5.	Hog Remains 2
Map 6.	Robert's Mtn. 27-11C
Map 7.	Winona
Map 8.	Elk Mountain #3
Map 9.	Elk Mountain
Map10.	Savage Creek 7
Map 11.	Savage Creek
Map 12	Savage Creek 004
Map 13.	Savage Pass 23-1
Map 14.	Tall Timber 29-12
Map 15.	North Fork Thompson Cr.
Map 16.	Bear Grapes 21-3B
Map 17.	Bear Grapes 3A/3C































